

CHAPTER 5

FINANCING

5.1 General

Funding mechanisms developed to cover the capital project costs identified in this drainage master plan are discussed in this chapter. As the projects identified in the master plan are required to mitigate the impacts of new development, developer extractions in the form of impact fees are emphasized. As such, the update of the current Planned Local Drainage Area (PLDA) fees is developed, while other funding options are also summarized. State law precludes establishment of a facility fee unless it can be shown to be reasonably related to the impacts created by the development. The proposed program meets the intent of this law by requiring new developments pay the full costs to mitigate their impacts to the extent permitted by State and City code.

5.2 Source of Authority

The legislation providing authority for, and specifying the methodology of, improvement exactions, including impact fees, are found in the statutory provisions of the Subdivision Map Act sections paragraphs 66410 – 66499.37 of the Government Code of the State of California. These sections impose numerous restrictions on the establishment and use of impact fees. For example, money collected through such impact fees must be kept in separate PLDA funds (accounts), and expended solely for the construction or reimbursement of new drainage facilities within that PLDA. Under Government Code Sections 66001 et al (aka AB 1600), the fee proceeds must be expended or committed within five years of their payment. The nature, use, and limitations of PLDA fees are also defined in City Municipal Code (CMC) 15.08 (Ordinance NS-293 paragraph 2), which prohibits billing PLDA (impact) fees to publicly-owned parcels. These parcels include city, county, and school district lands. Finally, California Government Code Section 65865 provides for negotiated development agreements developed between the City and the developer.

5.3 History

The City of Carlsbad has commissioned and approved three previous drainage master plan and updates. Historically, the financing of storm drainage facilities has been considered the responsibility of those wishing to develop their property, as the need for new or upgraded facilities can be directly linked to land development practices. The City's Growth Management Program recognizes this fact by inclusion of a facility standard which requires that "Drainage facilities must be provided as required by the City concurrent with development." However, the last master plan, completed in March 1994, provided the basis for the current PLDA areas and fees. The analysis described herein utilized the same fee calculation methodology as the March 1994 update, but with certain changes. For example, certain drainage runoff coefficients used in the PLDA fees have been updated to agree with the runoff levels of the engineering analysis of this study. Moreover, with the increased level of detail available, the existing low and high runoff categories have been expanded to low, medium and high runoff categories.

5.4 Present Financial Status

The City's four PLDAs are segregated by watershed. The fees were last reviewed in 1992, but are increased periodically based on inflationary changes in construction costs. Currently either a high or a low runoff fee is applied to the variety of land use types within each PLDA. The current fees are shown below:

PLDA Fees (\$/acre, effective September 1, 2006)

Runoff Level	Planned Local Drainage Area			
	A	B	C	D
Low	\$2,208	\$4,748	\$3,549	\$49
High	\$3,614	\$7,767	\$5,809	\$79

As shown, the fees vary broadly among the PLDAs. The differences are due to the different costs of development-related drainage projects in each area identified in the last master plan. These costs are updated in this new drainage master plan.

Limits imposed by the City on "constrained" lands result in certain areas being restricted to open space. These constrained lands do not increase drainage requirements or require new facilities, and are not billed PLDA fees. Moreover, under City code, publicly owned parcels (including city, county, and school lands) cannot be charged PLDA fees. As such, all drainage facility costs on public lands must be funded from sources other than PLDA fee proceeds.

There are four existing PLDA funds. Each PLDA is independently funded, and has a restricted cash reserve fund for the exclusive use of development-related drainage facility expansion payments. These City-held funds are restricted for the exclusive use of development-related drainage facility expansion. As provided in Table 5-1, there are presently \$6.6 million in undesignated funds. Under Government Code Sections 66001 et al (aka AB 1600), these fee proceeds must be expended or committed within five years of their payment. In addition, \$891,000 in PLDA B fees are due from developers who have made partial payments on recent industrial developments, totaling 242 acres. The resulting balance totals \$7.5 million.

5.5 Financing Method Alternatives

Several sources of funds may be available for funding the proposed drainage facilities, including:

- General Fund Contributions
- Assessment District Bonds
- State and Federal Loans and Grants
- Redevelopment Agency Tax Revenues
- Transportation-Related Funding
- Special Benefit District Fees
- Developer Extractions

Each of the mechanisms is described below in the order presented above. The preferred alternative, developer extractions using PLDA fees, is described in detail.

General Fund Contributions are withdrawn from the available funds of the City. General Fund monies have typically been used for development-related storm drain projects only when reimbursement is expected. In the present financial climate, undedicated General Funds are scarce, and their use very limited. However, it is assumed that General Funds are available for financing drainage projects that by City law cannot be funded from developers. Moreover, the City can loan with interest money to the PLDA funds for current project costs, in anticipation of repayment with future PLDA fee proceeds. This is described in City Municipal Code Section 15.08.060, which provides that PLDA fees may include financing costs. Section 15.08.090 provides that the City General Fund may provide project funds in advance of reimbursement from future PLDA fee proceeds (Ordinance NS-293 Paragraph 2). It is important that a fair rate of interest is provided by the PLDA funds and that the General Fund is repaid.

Assessment District Bond proceeds allow facilities to be constructed with funds obtained by the sale of bonds. They are typically used to construct large public works facilities. The assessments are imposed upon property owners in proportion to the benefit received. In the past, City policy was that Assessment District bonds should be used only for large projects that provide facilities which benefit the general population of the City. With the drainage facilities required as a result of land development, a more efficient funding method for the new drainage facilities is *developer extractions* as described below.

State and Federal Loans and Grants, such as those funded by Proposition 50, are available at limited times with varying requirements of application procedures, qualification criteria, and matching funds. The lack of reliable funding, and the significant limit in their use for land development, effectively removes them from consideration. However, the City should remain poised to take advantage of opportunities to obtain federal and state funds. It is recommended that federal and state funds, if any, be sought in areas of the developed areas of the City where drainage facility needs are significant.

Redevelopment Agency Tax Revenues are typically used in older communities by securing a portion of the future increase (additional increments) in property tax proceeds. By constructing public improvements, property values are enhanced within the redevelopment area, thereby

increasing the tax proceeds to pay for the improvements. This funding mechanism isn't appropriate for new development infrastructure funding.

Transportation-Related Funding. Other regional, state, and federal funds may be available for certain elements of the CIP. For example, the existence of county roads and Interstate 5 within the PLDAs creates opportunities for two other funding sources for the drainage projects. The Federal Highway Administration (FHWA), part of the U.S. Department of Transportation, may have funding for the drainage impacts of construction projects on their highways. Coordination of the local drainage projects with FHWA projects may identify mutual funding opportunities. Similarly, regional money from TransNet funds may be available. TransNet is San Diego County's half-cent sales tax for transportation improvements, including local street and road improvements. TransNet funding is combined with state and federal dollars to improve the region's transportation network, including bicycle paths and facilities.

Special Benefit Districts are established under Section 45700 et seq. of the Government Code, titled the Benefit Assessment Act of 1982. The Districts may be formed to provide for the maintenance and operation costs of drainage, flood control, or street lighting. The Districts may also impose assessments to finance the cost of installation and improvement of drainage and flood control facilities. The act allows fees for flood control purposes to be determined on the basis of the proportionate storm water runoff from each parcel. A special benefit district would be initiated by the City Council and approved by the landowners within the proposed district in a simple majority vote. The City presently has one special benefit district for drainage purposes, the Buena Vista Channel Maintenance District. This funding mechanism relies on funding from existing, established property owners, but isn't appropriate for new or yet undeveloped lands.

Development Extractions are the most common method used to fund improvements required as a result of development. There are five major forms of development extractions described in the Map Act, including:

- Dedications of land
- Fees in lieu of dedications
- Project design and improvements
- Development agreements
- Impact Fees

Outright *dedications of land* and/or a mandatory *fee in lieu of a land dedication*, are the setting aside of land by a property owner, for public use. In general, developers are also responsible for the construction of both onsite and offsite drainage facilities which are necessary to mitigate their project impacts and/or to provide for the orderly development of their property. In some cases, it is necessary or desirable to construct facilities which are in excess of the need of a single developer and provide a benefit to the community as a whole. To handle these cases, a City would use impact fees to either construct needed facilities or to reimburse developers for their construction of facilities. Also, a *fee in lieu of a land dedication* is used when appropriate land is not owned by the developer. The *in lieu fee* differs from an *Impact Fee* in that the *in lieu fee* is a lump sum contribution in lieu of property, while an *Impact Fee* is a unit charge, and is generally based on acreage. *Project design and improvements* refers to the ability of local government to condition development on compliance with the goals and policies

in city general and/or specific plans. More importantly, in certain cases project improvements can be required from developers, when no other funding source is available. This is done under *development agreements*, as a subset of development plans. State law provides for the adoption of development agreements between a developer and the City, in accordance with Government Code Section 65865 et seq. The negotiated agreements provide developers the assurance that their approvals will not be affected by some future local policy or regulation change. In exchange, the developer must meet certain additional conditions, including facilities or contributions benefiting the PLDAs. As set forth in Government Code Section 65866, the City, unless otherwise provided by the development agreement, may apply new rules or policies affecting that developer, as long as they do not conflict with the existing rules, regulations, or policies applicable to that property.

Impact Fees. The City's *impact fees* for drainage facilities are called PLDA fees. These fees are based on acreage, and are required to mitigate the impacts of new development on the local community. Based on City and State government codes, and on standards for developer extractions to fund municipal facilities, the *impact fee* is based on an "essential nexus" to the impact from development on the community. This nexus results in a "rough proportionality" between the fee level and the City's cost to mitigate the impacts of new development.

The PLDA impact fees developed herein have the characteristics that they are

- based on a predetermined monetary payment per acre of each land use category;
- assessed when a subdivision map or certain building permit is issued; and
- proportional to the new burden placed on drainage facilities by development.

The key calculations for these acreage-based fees are based on the incremental costs of new expansion-related projects required for new stormwater drainage, and the additional new drainage volumes from the new developments. Based on this incremental cost approach, fees are based solely on the additional stormwater runoff resulting from development of open space lands.

Limits imposed by the City on "constrained" lands may result in certain areas as being restricted to open space. Note that constrained lands do not increase drainage requirements or require new facilities, and are not be billed PLDA fees. No costs are allocated to or collected as PLDA fees from any open space land or any parcel area that is constrained from development. Moreover, under City code, publicly owned parcels (including city, county, and school lands) cannot be charged PLDA fees. As such, all drainage facility costs associated with these public lands must be funded from sources other than PLDA fee proceeds.

5.6 Financing Recommendations

The use of *development extractions* is recommended as the primary source of funding for new storm drainage facilities. *Development extractions* will include payment of PLDA impact fees on an acreage basis, contributions of developer-built facilities, and lump sum payments under developer

agreements. This method is consistent with past practice and the City's Growth Management Program.

The primary funding source for the improvement of drainage facilities is *developer extractions* in the form of updated *impact fees*. There are four PLDA areas with impact fees currently established for each area. As provided in the prior chapters of this report and summarized in Table 5-2, the estimated construction costs for the new storm drainage facilities is \$19.7 million. In Table 5-2, the types of pipes, channels, and other conveyance facilities needed to transport the additional runoff flows in each PLDA area is described. The total project costs reflect the new and expanded facilities that will be required to serve the proposed developments. The mark-up costs include the construction, estimated design, construction management, and contingency costs.

Due to PLDA fee proceeds previously received or anticipated to fund the project costs, only \$12.2 million of the \$19.7 million in development projects is required for additional project funding. As City regulations prohibit charging of PLDA fees to developable public lands, the total collectable PLDA fees are further reduced to \$12.0 million.

The PLDA projects are projected to have an unfunded requirement totaling \$185,000 associated with improvements on publicly owned lands. Lacking any other funding source, the City may be able to enter into developer agreements, as authorized by California Government Code Section 65865. These agreements would be in addition to any PLDA fee payments.

5.7 Fee Analysis

In determining fee amounts, the primary consideration is to effectively and fairly apportion fees in relation to the development's demand on required drainage facilities. Drainage runoff is directly related to the permeability (absorption) characteristics of the land upon which the rainfall occurs. Permeability is measured by a value known as the "runoff coefficient" that is statistically related to land use. Values of various runoff coefficients for different soil types and land uses range from a low of 0.20 for undeveloped open space to high of 0.85 for commercial lots. Note that in this chapter only the incremental increase in runoff values over undisturbed lands is used to properly allocate costs of improvements. As shown in Table 5-3, each of the land use type is assigned parcel characteristics, including:

- runoff coefficient;
- authority to be billed PLDA fees;
- expected redevelopment and infill growth; and
- portion of land to be constrained.

The planning period is the period defined for the scheduled development projects, with city-wide build-out projected in 2030. The planned development projects, plus future unplanned redevelopment infill growth, will bring the City to the total build-out, excluding constrained lands. Table 5-4 lists the ultimate City build-out areas by PLDA and land use, as well as listing current development.

In Tables 5-3 and 5-4 are summaries of the information detailed in the following appendices:

- Appendix A - Planned Development Characteristics
- Appendix B - Runoff Coefficients
- Appendix C - Loading Allocations

As previously shown in Table 5-3, existing residential and business developments are subject to redevelopment infill growth of 10 percent, which will result in a total of 1,130 acres Citywide of additional development. Much of the 1,549 acres of total planned development includes constrained lands which cannot be developed under current City Subdivision Map Codes. Therefore, adding the unplanned redevelopment infill plus scheduled development projects, less the constrained lands and non-billable developments, results in new development of 2,679 acres. This total development includes unbillable public lands, as previously described. As such, the net total billable development is 2,631 acres for all PLDA areas, as detailed in Table 5-4.

To calculate the expected new runoff loads from all billable and unbillable land uses, the total new development (not including the existing development or undeveloped open space) is multiplied by the runoff coefficient assigned to each land use type. These loads were then used to spread out the project costs to the various land use types, by PLDA area.

Table 5-5 lists the total project costs for the new development projects minus existing but undesignated PLDA proceeds, less PLDA costs allocated to non-billable publicly-owned lands. Based on the calculated equitable (proportional) runoff levels for the low, medium and high runoff volumes from each fee category, a fee level is identified for each PLDA.

Table 5-6 describes how the PLDA costs are to be funded from each area and land use type, excluding publicly owned parcels (including city, county, and school lands). The unit PLDA fees shown in Table 5-7 are based on costs described above, allocated to each land use billing category, and divided by the acres of each category.

In Table 5-7, drainage classes for each PLDA are divided into three categories. The table shows the billable equivalent residential medium (RM) density land use acres by PLDA and runoff category (level) under the proposed three-tier structure. This proposed fee structure includes a third runoff category of “medium” to the existing “low” and “high” categories. The proposed fee structure changes the category from low to medium for medium-density housing (RM land use), and from high to medium for RMH medium/high-density and RH high-density housing. Housing densities are based on the growth control point densities in Table 37 of the 2000 General Plan, with a standard dwelling density of 6 RM DUs per acre. The billable project costs are then divided by the acres to get per-acre fees by runoff category. As shown, the updated PLDA fees per acre for low, medium and high runoff developments vary considerably among the different PLDA areas.

Table 5-8 offers a comparison of PLDA fees under the current and proposed structures. As shown, both the current and proposed PLDA fees vary significantly by area, with the fees increasing for residential developments in PLDAs A and D, but decreasing in PLDA B and C. When the fee increases are evaluated, the average fee is approximately \$691 per dwelling unit, and none of the fees exceed \$1,513 per dwelling unit.

5.8 Fee Adjustments

An administrative variance procedure should be established to allow waivers of full payment of PLDA fees. Requests for relief would be limited to the following circumstances:

- When portions of the project have slopes greater than 25 percent and less than 40 percent, as defined in Chapter 21.95 CMC, one-half the fee for those portions may be waived. The criteria for waiver should be that the slope is undisturbed and has a flourishing cover of native vegetation; that the owner irrevocably covenants with the City to maintain the slope as open space; and that the sloped area has not been used to compute more than one-half of an area equal to the sloped area used to establish the maximum development density of the project.
- The increment of a project that is replacing a building destroyed by accidental fire or natural disaster may be considered to be deducted from the valuation of the project PLDA fee.
- Structures that will not be in place from November 16 through April 14 of any year are considered temporary for the purposes of this report. Temporary buildings may have the payment of PLDA fees reimbursed without interest when they have been removed and when the areas under and appurtenant to them are restored to their natural hydrologic condition. Appurtenant areas include parking areas, walks, activity areas and other areas accessory to the use of the building. Structures and appurtenant areas that have not been removed between any period from November 16 through April 14 during their existence are not eligible for reimbursement of any portion of the PLDA fee.

An application for waiver or refund of PLDA fees should be submitted in writing by the owner of the land involved. The request should be accompanied by all of the following:

- Written statement citing the reason(s) why the refund is justified.
- Proof of ownership of the land should be provided when fees have been previously paid. A preliminary title report, dated within 30 days of the request for refund, that names the requestor as fee title owner of the land will be satisfactory proof. Proof of ownership should not be required when fees are being waived prior to their payment.
- The current fee for an administrative variance may be waived (subject to City Engineer determination).

5.9 Fee Credits and Reimbursement for Constructed Facilities

A developer who constructs all or a portion of one or more of the drainage facilities identified in the Drainage Master Plan study may be eligible for reimbursement from funds accumulated through collection of PLDA fees insofar as the facility costs were included within the fee computation formula. No fee credits or reimbursements are allowed for facility costs not included in the fee program. The maximum reimbursement is limited to the actual cost of installing the facilities. The form and manner in which reimbursements are given will be determined at the time the developer enters into a reimbursement agreement with the City. All reimbursement agreements are approved by City Council. Whenever the actual cost of installation of a drainage facility exceeds the cost estimate in this report (adjusted for inflation), a revised schedule with increased unit fees should be adopted to ensure that adequate funds are collected to cover the reimbursement payments.

Any request for reimbursement should be made as early as possible (preferably during the planning approval stage) to ensure adequate lead time for the allocation of available funds for reimbursement.

Fee credits will be given for all developments which construct onsite master planned drainage facilities up to the maximum amount of PLDA fee paid by the development. Fee credits will be determined at the time PLDA fees are due and will in all cases be based upon the value of the facility as it is estimated in this report (adjusted for inflation) unless a revised fee schedule is approved in advance of the fee payment.

CHAPTER 5 TABLES

Table 5-1
PRESENT FINANCIAL STATUS

Description	PLDA A	PLDA B	PLDA C	PLDA D	Total
Undesignated PLDA Proceeds Balance (a)	\$164,866	\$2,794,399	\$3,436,213	\$214,271	\$6,609,749

PLDA Fee Differentials -- Balance Due (b)					
	Acres				Deposit (\$/acre)
	PLDA A	PLDA B	PLDA C	PLDA D	
Planned Industrial (PI)		209			\$6,463
Planned Industrial (PI)		33			\$5,855

Source: Project staff 12/8/06

- a. The undesignated PLDA balances are the current cash balance from PLDA fees as of 1/1/06 that have not been designated, and are available for current and projected projects.
- b. Partial payments were made on certain developments, with the balance of the PLDA Fee due upon finalization of the updated PLDA fee.

Table 5-2
NEW DEVELOPMENT PROJECT COSTS BY PLDA

Pipe ID	Length (ft)	Diameter (in)	Material	Construction Cost (a)	Mark-up Costs (b)	Capital Project Cost
PLDA A						
AAAA	900	24	RCP Type	\$176,731	\$161,048	\$337,780
AAA	550	36	RCP Type	\$119,138	\$110,763	\$229,901
AC	1000 & 275	36 & 18	RCP Type & Concrete Type	\$467,623	\$369,711	\$837,335
AFA	2000	Channel	Natural Enhanced Channel	\$27,747	\$65,377	\$93,124
AFB	3600	Channel	Natural Enhanced Channel	\$55,520	\$87,702	\$143,222
Total PLDA A						\$1,641,362
PDLA B						
B	3000	Channel	Channel Dredging	\$902,270	\$738,144	\$1,640,414
BB-1	1100	18	RCP Type	\$138,075	\$123,692	\$261,767
BB-2	1700	36	Earthen Channel	\$320,726	\$258,394	\$579,120
BCA	2900	24	RCP Type	\$476,536	\$383,506	\$860,042
BCB	925	30	RCP Type	\$215,732	\$176,652	\$392,385
BCC	925	36	RCP Type	\$216,583	\$179,032	\$395,615
BFA	1600	42	RCP Type	\$418,521	\$342,113	\$760,634
BFB-U	3800	Channel	Roadside Swale	\$63,146	\$65,025	\$128,171
BFB-L	800	48	RCP Type	\$192,293	\$178,021	\$370,313
BF1	N/A	Sed Basin	Detention Basin	\$206,044	\$174,894	\$380,938
BJ	270 & N/A	RCB & Sed Basin	Detention Basin(3'x6' Box Culvert)	\$250,896	\$204,834	\$455,730
BJB	N/A	Outlet Structure	Wing Wall For 7'x11' Box Culvert	\$73,491	\$71,258	\$144,750
BL-U	800	39	RCP Type	\$161,971	\$151,804	\$313,775
BL-L	20 & 125	90 & Bridge	RCP Type and Bridge	\$480,638	\$310,417	\$791,055
BM	260	RCB	Drainage Culvert	\$336,120	\$188,850	\$524,970
BNB	3600	84	RCP Type	\$1,758,011	\$1,446,003	\$3,204,014
BN	3600	Channel	Channel Dredging and Gabion Structures	\$171,807	\$189,166	\$360,973
BQ	800	Spot Enhance	Natural Enhanced Channel	\$61,393	\$59,045	\$120,438
BP	N/A & 28	Sed Basin & RCB	Detention Basin	\$57,106	\$57,738	\$114,844
Total PLDA B						\$11,799,947

Table 5-2
NEW DEVELOPMENT PROJECT COSTS BY PLDA

Pipe ID	Length (ft)	Diameter (in)	Material	Construction Cost (a)	Mark-up Costs (b)	Capital Project Cost
PLDA C						
C1	100	RCB	Box Culvert Bridge	\$1,424,013	\$1,670,184	\$3,094,197
C2	90	RCB	Drainage Culvert	\$203,490	\$432,693	\$636,183
CA	600	Concrete Channel	Concrete Channel	\$186,308	\$335,273	\$521,581
Total PLDA C						\$4,251,961
PLDA D						
DBA	360	30	RCP Type	\$68,456	\$70,056	\$138,512
DBB	720	30	RCP Type	\$188,803	\$165,804	\$354,608
DFA	N/A	Treatment System	Detention Basin	\$93,326	\$129,970	\$223,296
DQB	2500	36	RCP Type	\$293,896	\$251,928	\$545,824
DH	3111	Spot Enhance	Natural Enhanced Channel	\$111,754	\$115,310	\$227,065
DZ	100	RCB (2)	Cast in place Bridge	\$316,488	\$175,998	\$492,485
Total PLDA D						\$1,981,789
Grand Total						\$19,675,059

All project costs are for new facilities to serve the proposed developments.

a. Source: File Basin Total Master.XLS 11/29/06

b. Estimated design, CM and contingency markups.

Table 5-3
Land Development Characteristics by PLDA

Land Use Code	Land Use Description	1. Parcel Characteristics				2. Ultimate City Build-out (including constrained areas open space, acres)					3. Net Developable Acreage (net of constrained areas, acres, a)				
		Runoff Coeff (Incr, b)	Billable Parcels (c)	Infill Growth	Constrained Lands (% d)	PLDA A	PLDA B	PLDA C	PLDA D	City Total	PLDA A	PLDA B	PLDA C	PLDA D	City Total
C	Commercial	65%	Yes	Yes	15%		0.9		7.6	8		0.2		1.1	1
C/O/RMH	Community Commercial/Professional & Related/Medium-High Density	65%	Yes	Yes	15%				159.0	159					0
CF	Community Facilities (e)	30%	No	No	0%	0.8	3.3	0.8	18.9	24				7.9	8
CF/P	Community Facilities/Private Schools (e)	30%	No	No	0%				15.9	16					0
E	Elementary School	30%	No	No	0%	23.5	41.5	0.9	120.8	187					0
E/J	Elementary School/Junior High (e)	30%	No	No	0%	8.3	12.2			21					0
G	Governmental Facilities	65%	No	No	0%	8.4	173.1	139.3		321					0
G/O	Government Facilities/Office & Related Commercial (e)	65%	No	No	0%				2.2	2					0
H	High School	30%	No	No	0%	1.4	78.8		88.5	169		33.8			34
HC	Continuation School	30%	No	No	0%		3.9			4					0
J	Junior High School	30%	No	No	0%		21.9		28.9	51					0
L	Local Shopping Mall (e)	65%	Yes	Yes	15%	35.1	30.8		95.7	162		17.6		39.9	57
N	Neighborhood Commercial	65%	Yes	Yes	15%			11.2	15.0	26					0
O	Office & Related Commercial	65%	Yes	Yes	15%	6.5	2.9		9.4	19	0.5	2.0		6.9	9
O/PI	Office & Related Commercial/Planned Industrial (e)	65%	Yes	Yes	15%		31.9	62.9		95					0
OS	Open Space	0%	No	No	100%	521	2,754	321	3,492	7,088	0.5	5.6			6
P	Private School	30%	Yes	No	15%	1.3	1.3			3					0
PI	Planned Industrial	65%	Yes	Yes	15%		1,488.4	887.4	114.8	2,491		328.9	12.6	0.2	342
PI/O	Planned Industrial/Office & Related	65%	Yes	Yes	15%			36.1	2.8	39					0
R	Regional Commercial	65%	Yes	Yes	15%	96.5	119.6	24.2		240	1.9	40.5			42
R/O/RMH	Recreation Commercial/Office & Related Commercial/Medium-High Density (e)	65%	Yes	Yes	15%				19.9	20					0
RH	High Density Residential	45%	Yes	Yes	15%	13.0	161.0	5.9	119.8	300	0.2	2.7		2.6	5
RH/C/O	High Density Residential/Community Commercial/Office and Related Comm	50%	Yes	Yes	15%		10.8			11		4.0			4
RH/L/CF	Hi Dens Res/Affordable Housing/Local Shop Ctr/Comm Facil (e)	50%	Yes	Yes	15%				28.3	28					0
RH/O	High Density Residential/ Office & Related Commercial	50%	Yes	Yes	15%				1.0	1					0

This is a draft report and is not intended to be a final representation of the work done or recommendations made by Brown and Caldwell. It should not be relied upon; consult the final report.

Table 5-3
Land Development Characteristics by PLDA

Land Use Code	Land Use Description	Runoff Coeff (Incr, b)	1. Parcel Characteristics			2. Ultimate City Build-out (including constrained areas open space, acres)					3. Net Developable Acreage (net of constrained areas, acres, a)				
			Billable Parcels (c)	Infill Growth	Constrained Lands (% d)	PLDA A	PLDA B	PLDA C	PLDA D	City Total	PLDA A	PLDA B	PLDA C	PLDA D	City Total
RL	Low Density Residential	15%	Yes	Yes	15%	4.5	275.1	11.2	427.0	718	1.1	135.0		21.7	158
RLM	Low-Medium Density Residential	15%	Yes	Yes	15%	876.6	2,971.2	291.9	3,824.9	7,965	66.4	522.1	19.3	132.1	740
RM	Medium Density Residential	20%	Yes	Yes	15%	221.8	460.2	376.0	1,383.2	2,441	0.3	5.6	1.0	41.3	48
RM/O	Medium Density Residential/ Office & Related Commercial	25%	Yes	Yes	15%	10.1		2.7	2.1	15					0
RMH	Medium-High Density Residential	30%	Yes	Yes	15%	117.7	220.8	36.6	594.0	969	2.1	7.9		16.0	26
RMH/O	Medium-High Density Residential/ Office & Related Commercial	30%	Yes	Yes	15%	9.6	10.0			20	0.4	0.7			1
RMH/T-R	Medium-High Density Residential/Travel/Recreation Commercial	30%	Yes	Yes	15%				11.7	12				4.9	5
TC	Transportation Corridor	65%	No	No	0%	67.2	150.9	84.0	152.0	454					0
T-R	Travel/Recreation Commercial	65%	Yes	Yes	15%	2.4	121.4	220.9	107.6	452	0.6	37.3	1.7	1.3	41
T-R/C	Travel/Recreation Commercial/Community Commercial	65%	Yes	Yes	15%		1.2	13.0	17.4	31					0
T-R/L	Travel/Recreation Commercial/Local Shopping Center (e)	65%	Yes	Yes	15%			0.0	28.0	28					0
T-R/O	Travel/Recreation Commercial/ Office & Related Commercial	65%	Yes	Yes	15%	0.0	7.5	10.9		18			4.3		4
T-R/O/OS	Travel/Recreation Commercial/Office & Related Commercial/Open Space	50%	Yes	Yes	15%	99.6				100					0
T-R/RH	Travel/Recreation Commercial/High Density (e)	65%	Yes	Yes	15%		1.5	5.3		7				0	
U	Public Utilities	45%	No	No	0%	0.8	130.0	28.4	9.7	169					
UA	Unplanned Areas	0%	No	No	0%		0.6	11.5	19.9	32					
V	Village	65%	Yes	No	15%	141.8	53.6			195					
Total (acres or runoff units)						2,268	9,339	2,578	10,923	25,108	87	1,147	39	276	1,549

a. Source: AllBasin_GPLU.XLS 11/1/06. Areas assigned to multiple land uses are applied to the primary use (i.e. RLM/OS is reassigned RLM).

b. Runoff coefficient source: McCuen, M. 1998 "Hydrologic Analysis and Design", p.377. The PLDA fees are based on incremental additional runoff coefficients above the existing runoff level of open space (20 percent).

c. Under Municipal City code, publicly owned parcels (including city, county and school lands) cannot be charged PLDA fees when developed.

d. Constrained land in parcels is constrained by subdivision and building codes from development. These constrained areas, as well as all open space, remain undeveloped, do not increase drainage requirements or require new facilities, and are not be billed as PLDA fees.

e. Values are developed from similar land use types.

Table 5-3 (continued)
Land Development by PLDA

Land Use Code	Land Use Description	4. Estimated Existing Development					5. Future Infill (residential, industrial and commercial #4*Infill)				
		PLDA A	PLDA B	PLDA C	PLDA D	City Total	PLDA A	PLDA B	PLDA C	PLDA D	City Total
C	Commercial	0	1	0	5	5	0	0	0	0	1
C/O/RMH	Community Commercial/Professional & Related/Medium-High Density	0	0	0	123	123	0	0	0	12	12
CF	Community Facilities (c)	1	3	1	11	16	0	0	0	0	0
CF/P	Community Facilities/Private Schools (c)	0	0	0	16	16	0	0	0	0	0
						187					
E	Elementary School	23	41	1	121		0	0	0	0	0
E/J	Elementary School/Junior High (c)	8	12	0	0	21	0	0	0	0	0
G	Governmental Facilities	8	173	139	0	321	0	0	0	0	0
G/O	Government Facilities/Office & Related Commercial (c)	0	0	0	2	2	0	0	0	0	0
H	High School	1	45	0	88	135	0	0	0	0	0
HC	Continuation School	0	4	0	0	4	0	0	0	0	0
J	Junior High School	0	22	0	29	51	0	0	0	0	0
L	Local Shopping Mall (c)	27	8	0	38	73	3	1	0	4	7
N	Neighborhood Commercial	0	0	9	12	20	0	0	1	1	2
O	Office & Related Commercial	5	0	0	1	6	0	0	0	0	1
O/PI	Office & Related Commercial/Planned Industrial (c)	0	25	49	0	73	0	2	5	0	7
OS	Open Space	0	0	0	0	0	0	0	0	0	0
P	Private School	1	1	0	0	2	0	0	0	0	0
PI	Planned Industrial	0	851	674	89	1,614	0	85	67	9	161
PI/O	Planned Industrial/Office & Related	0	0	28	2	30	0	0	3	0	3
R	Regional Commercial	73	56	19	0	147	7	6	2	0	15
R/O/RMH	Recreation Commercial/Office & Related Commercial/Medium-High Density (c)	0	0	0	15	15	0	0	0	2	2
RH	High Density Residential	10	122	5	90	227	1	12	0	9	23
RH/C/O	High Density Residential/Community Commercial/Office and Related Comm	0	5	0	0	5	0	0	0	0	0
RH/L/CF	Hi Dens Res/Affordable Housing/Local Shop Ctr/Comm Facil (c)	0	0	0	22	22	0	0	0	2	2
RH/O	High Density Residential/ Office & Related	0	0	0	1	1	0	0	0	0	0

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Table 5-3 (continued)
Land Development by PLDA

		4. Estimated Existing Development					5. Future Infill (residential, industrial and commercial #4*Infill)				
Land Use Code	Land Use Description	PLDA A	PLDA B	PLDA C	PLDA D	City Total	PLDA A	PLDA B	PLDA C	PLDA D	City Total
	Commercial										
RL	Low Density Residential	3	90	9	310	411	0	9	1	31	41
RLM	Low-Medium Density Residential	617	1,821	208	2,836	5,482	62	182	21	284	548
RM	Medium Density Residential	171	350	290	1,031	1,842	17	35	29	103	184
RM/O	Medium Density Residential/ Office & Related Commercial	8	0	2	2	12	1	0	0	0	1
RMH	Medium-High Density Residential	89	163	28	444	725	9	16	3	44	73
RMH/O	Medium-High Density Residential/ Office & Related Commercial	7	7	0	0	14	1	1	0	0	1
RMH/T-R	Medium-High Density Residential/Travel/Recreation Commercial	0	0	0	5	5	0	0	0	0	0
TC	Transportation Corridor	67	151	84	152	454	0	0	0	0	0
T-R	Travel/Recreation Commercial	1	60	169	82	312	0	6	17	8	31
T-R/C	Travel/Recreation Commercial/Community Commercial	0	1	10	13	24	0	0	1	1	2
T-R/L	Travel/Recreation Commercial/Local Shopping Center (c)	0	0	0	22	22	0	0	0	2	2
T-R/O	Travel/Recreation Commercial/ Office & Related Commercial	0	6	5	0	10	0	1	0	0	1
T-R/O/OS	Travel/Recreation Commercial/Office & Related Commercial/Open Space	77	0	0	0	77	8	0	0	0	8
T-R/RH	Travel/Recreation Commercial/High Density (c)	0	0	1	4	5	0	0	0	0	1
U	Public Utilities	1	130	28	10	169	0	0	0	0	0
UA	Unplanned Areas	0	1	11	20	32	0	0	0	0	0
V	Village	107	43	0	0	150	0	0	0	0	0
Total (acres or runoff units)		1,306	4,191	1,769	5,595	12,861	109	357	150	515	1,130

Table 5-4
Land Use and Future Development by PLDA

Land Use Code	Land Use Description	6. Total New Development (#3 & #5, acres)					7. Billable Developments (#1 & #6, acres)					Runoff Coeff (Incr.)	8. Gross New Runoff Loads (#6 x Coeff, Units billable & unbillable)				Grand Total Units
		PLDA A	PLDA B	PLDA C	PLDA D	City Total	PLDA A	PLDA B	PLDA C	PLDA D	City Total		PLDA A	PLDA B	PLDA C	PLDA D	
C	Commercial Community	0.0	0.2	0.0	1.6	2	0.0	0.2	0.0	1.6	2	65%	0.0	0.1	0.0	1.0	1
C/O/RMH	Commercial/Professional & Related/Medium-High Density	0.0	0.0	0.0	12.3	12	0.0	0.0	0.0	12.3	12	65%	0.0	0.0	0.0	8.0	8
CF	Community Facilities	0.0	0.0	0.0	7.9	8	0.0	0.0	0.0	0.0	0	30%	0.0	0.0	0.0	2.4	2
CF/P	Community Facilities/Private Schools	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	30%	0.0	0.0	0.0	0.0	0
E	Elementary School	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	30%	0.0	0.0	0.0	0.0	0
E/J	Elementary School/Junior High	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	30%	0.0	0.0	0.0	0.0	0
G	Governmental Facilities	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	65%	0.0	0.0	0.0	0.0	0
G/O	Government Facilities/Office & Related Commercial	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	65%	0.0	0.0	0.0	0.0	0
H	High School	0.0	33.8	0.0	0.0	34	0.0	0.0	0.0	0.0	0	30%	0.0	10.1	0.0	0.0	10
HC	Continuation School	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	30%	0.0	0.0	0.0	0.0	0
J	Junior High School	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	30%	0.0	0.0	0.0	0.0	0
L	Local Shopping Mall	2.7	18.4	0.0	43.6	65	2.7	18.4	0.0	43.6	65	65%	1.8	12.0	0.0	28.4	42
N	Neighborhood Commercial	0.0	0.0	0.9	1.2	2	0.0	0.0	0.9	1.2	2	65%	0.0	0.0	0.6	0.8	1
O	Office & Related Commercial	0.9	2.0	0.0	7.0	10	0.9	2.0	0.0	7.0	10	65%	0.6	1.3	0.0	4.5	6
O/PI	Office & Related Commercial/Planned Industrial	0.0	2.5	4.9	0.0	7	0.0	2.5	4.9	0.0	7	65%	0.0	1.6	3.2	0.0	5
OS	Open Space	0.5	5.6	0.0	0.0	6	0.0	0.0	0.0	0.0	0	0%	0.0	0.0	0.0	0.0	0
P	Private School	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	30%	0.0	0.0	0.0	0.0	0
PI	Planned Industrial	0.0	414.0	80.1	9.1	503	0.0	414.0	80.1	9.1	503	65%	0.0	269.1	52.0	5.9	327
PI/O	Planned Industrial/Office & Related	0.0	0.0	2.8	0.2	3	0.0	0.0	2.8	0.2	3	65%	0.0	0.0	1.8	0.1	2
R	Regional Commercial	9.2	46.1	1.9	0.0	57	9.2	46.1	1.9	0.0	57	65%	6.0	30.0	1.2	0.0	37
R/O/RMH	Recreation Commercial/Office & Related Commercial/Medium-High Density	0.0	0.0	0.0	1.5	2	0.0	0.0	0.0	1.5	2	65%	0.0	0.0	0.0	1.0	1
RH	High Density Residential	1.2	14.9	0.5	11.6	28	1.2	14.9	0.5	11.6	28	45%	0.5	6.7	0.2	5.2	13
RH/C/O	High Density Residential/Community Commercial/Office and Related Comm	0.0	4.5	0.0	0.0	5	0.0	4.5	0.0	0.0	5	50%	0.0	2.3	0.0	0.0	2
RH/L/CF	Hi Dens Res/Affordable Housing/Local Shop Ctr/Comm Facil	0.0	0.0	0.0	2.2	2	0.0	0.0	0.0	2.2	2	50%	0.0	0.0	0.0	1.1	1
RH/O	High Density Residential/ Office &	0.0	0.0	0.0	0.1	0	0.0	0.0	0.0	0.1	0	50%	0.0	0.0	0.0	0.0	0

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Table 5-4
Land Use and Future Development by PLDA

Land Use Code	Land Use Description	6. Total New Development (#3 & #5, acres)					7. Billable Developments (#1 & #6, acres)					Runoff Coeff (Incr.)	8. Gross New Runoff Loads (#6 x Coeff, Units billable & unbillable)				Grand Total Units
		PLDA A	PLDA B	PLDA C	PLDA D	City Total	PLDA A	PLDA B	PLDA C	PLDA D	City Total		PLDA A	PLDA B	PLDA C	PLDA D	
	Related Commercial																
RL	Low Density Residential	1.3	144.0	0.9	52.8	199	1.3	144.0	0.9	52.8	199	15%	0.2	21.6	0.1	7.9	30
RLM	Low-Medium Density Residential	128.1	704.3	40.1	415.6	1,288	128.1	704.3	40.1	415.6	1,288	15%	19.2	105.6	6.0	62.3	193
RM	Medium Density Residential	17.4	40.7	30.0	144.4	232	17.4	40.7	30.0	144.4	232	20%	3.5	8.1	6.0	28.9	46
RM/O	Medium Density Residential/ Office & Related Commercial	0.8	0.0	0.2	0.2	1	0.8	0.0	0.2	0.2	1	25%	0.2	0.0	0.1	0.0	0
RMH	Medium-High Density Residential	11.0	24.3	2.8	60.5	99	11.0	24.3	2.8	60.5	99	30%	3.3	7.3	0.8	18.1	30
RMH/O	Medium-High Density Residential/ Office & Related Commercial	1.1	1.4	0.0	0.0	3	1.1	1.4	0.0	0.0	3	30%	0.3	0.4	0.0	0.0	1
RMH/T-R	Medium-High Density Residential/ Travel/Recreation Commercial	0.0	0.0	0.0	5.3	5	0.0	0.0	0.0	5.3	5	30%	0.0	0.0	0.0	1.6	2
TC	Transportation Corridor	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	65%	0.0	0.0	0.0	0.0	0
T-R	Travel/Recreation Commercial	0.7	43.3	18.6	9.5	72	0.7	43.3	18.6	9.5	72	65%	0.5	28.1	12.1	6.1	47
T-R/C	Travel/Recreation Commercial/ Community Commercial	0.0	0.1	1.0	1.3	2	0.0	0.1	1.0	1.3	2	65%	0.0	0.1	0.7	0.9	2
T-R/L	Travel/Recreation Commercial/ Local Shopping Center	0.0	0.0	0.0	2.2	2	0.0	0.0	0.0	2.2	2	65%	0.0	0.0	0.0	1.4	1
T-R/O	Travel/Recreation Commercial/ Office & Related Commercial	0.0	0.6	4.7	0.0	5	0.0	0.6	4.7	0.0	5	65%	0.0	0.4	3.1	0.0	3
T-R/O/OS	Travel/Recreation Commercial/ Office & Related Commercial/ Open Space	7.7	0.0	0.0	0.0	8	7.7	0.0	0.0	0.0	8	50%	3.8	0.0	0.0	0.0	4
T-R/RH	Travel/Recreation Commercial/ High Density	0.0	0.0	0.1	0.4	1	0.0	0.0	0.1	0.4	1	65%	0.0	0.0	0.1	0.3	0
U	Public Utilities	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	45%	0.0	0.0	0.0	0.0	0
UA	Unplanned Areas	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0%	0.0	0.0	0.0	0.0	0
V	Village	13.3	3.0	0.0	0.0	16	13.3	3.0	0.0	0.0	16	65%	8.6	1.9	0.0	0.0	11
Total (acres or runoff units)		196	1,504	189	790	2,679	195	1,464	189	782	2,631		49	507	88	186	829
Percent Billable to Total Developments							100%	97%	100%	99%	98%	Gross RM Acres:	243	2,534	440	930	4,146

The planning period for the Drainage Master Plan is limited to the period defined for the scheduled development projects.

Net Billable RM Acres:	243	2,483	440	918	4,084
Residential RM Acres:	136	760	66	626	1,589
Res as % of Total Billable:	56%	31%	15%	68%	39%



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Table 5-5
Total PLDA-Related Balances, Costs & Payments

Description	PLDA A	PLDA B	PLDA C	PLDA D	Net from Each PLDA
New Development Projects	\$1,641,362	\$11,799,947	\$4,251,961	\$1,981,789	\$19,675,059
Less Differential Due on Net Fees with Deposits		(\$890,970)			(\$890,970)
Less PLDA Fund Balance	(\$164,866)	(\$2,794,399)	(\$3,436,213)	(\$214,271)	(\$6,609,749)
Unfunded Costs within each PLDA	\$1,476,496	\$8,114,578	\$815,748	\$1,767,518	\$12,174,340
Less Project Costs in Public Lands	\$0	\$162,128	(\$0)	\$22,434	\$184,563
Total Costs to be Recovered from Future PLDA Fees	\$1,476,496	\$7,952,449	\$815,748	\$1,745,084	\$11,989,778
Proceeds from Future PLDA Fees	\$1,476,496	\$7,952,449	\$815,748	\$1,745,084	\$11,989,778

Table 5-6
Project Costs Allocated to Land Uses by PLDA

		9. Allocated Project Costs (spread based on #8)					10. Project Costs Recovered from Billable Parcels (#1 Billable and #9, a)				
Land Use Code	Land Use Description	PLDA A	PLDA B	PLDA C	PLDA D	Grand Total	PLDA A	PLDA B	PLDA C	PLDA D	Total
C	Commercial	\$0	\$2,394	\$0	\$9,780	\$12,174	\$0	\$2,394	\$0	\$9,780	\$12,174
C/O/RMH	Community Commercial/Professional & Related/Medium-High Density	\$0	\$0	\$0	\$75,867	\$75,867	\$0	\$0	\$0	\$75,867	\$75,867
CF	Community Facilities	\$0	\$0	\$0	\$22,434	\$22,434	\$0	\$0	\$0	\$0	\$0
CF/P	Community Facilities/Private Schools	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E	Elementary School	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E/J	Elementary School/Junior High	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G	Governmental Facilities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G/O	Governmental Facilities/Office & Related Commercial	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
H	High School	\$0	\$162,128	\$0	\$0	\$162,128	\$0	\$0	\$0	\$0	\$0
HC	Continuation School	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
J	Junior High School	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
L	Local Shopping Mall	\$53,629	\$191,572	\$0	\$269,407	\$514,608	\$53,629	\$191,572	\$0	\$269,407	\$514,608
N	Neighborhood Commercial	\$0	\$0	\$5,223	\$7,159	\$12,382	\$0	\$0	\$5,223	\$7,159	\$12,382
O	Office & Related Commercial	\$18,136	\$21,078	\$0	\$43,064	\$82,278	\$18,136	\$21,078	\$0	\$43,064	\$82,278
O/PI	Office & Related Commercial/Planned Industrial	\$0	\$25,655	\$29,326	\$0	\$54,981	\$0	\$25,655	\$29,326	\$0	\$54,981
OS	Open Space	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
P	Private School	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PI	Planned Industrial	\$0	\$4,308,878	\$482,750	\$56,153	\$4,847,782	\$0	\$4,308,878	\$482,750	\$56,153	\$4,847,782
PI/O	Planned Industrial/Office & Related	\$0	\$0	\$16,806	\$1,330	\$18,136	\$0	\$0	\$16,806	\$1,330	\$18,136
R	Regional Commercial	\$181,461	\$479,798	\$11,252	\$0	\$672,511	\$181,461	\$479,798	\$11,252	\$0	\$672,511
R/O/RMH	Recreation Commercial/Office & Related Commercial/Medium-High Density	\$0	\$0	\$0	\$9,510	\$9,510	\$0	\$0	\$0	\$9,510	\$9,510
RH	High Density Residential	\$16,136	\$107,406	\$1,914	\$49,561	\$175,017	\$16,136	\$107,406	\$1,914	\$49,561	\$175,017
RH/C/O	High Density Residential/Community Commercial/Office and Related Comm	\$0	\$36,099	\$0	\$0	\$36,099	\$0	\$36,099	\$0	\$0	\$36,099
RH/L/CF	Hi Dens Res/Affordable Housing/Local Shop Ctr/Comm Facil	\$0	\$0	\$0	\$10,384	\$10,384	\$0	\$0	\$0	\$10,384	\$10,384
RH/O	High Density Residential/ Office & Related Commercial	\$0	\$0	\$0	\$379	\$379	\$0	\$0	\$0	\$379	\$379

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Table 5-6
Project Costs Allocated to Land Uses by PLDA

		9. Allocated Project Costs (spread based on #8)					10. Project Costs Recovered from Billable Parcels (#1 Billable and #9, a)				
Land Use Code	Land Use Description	PLDA A	PLDA B	PLDA C	PLDA D	Grand Total	PLDA A	PLDA B	PLDA C	PLDA D	Total
RL	Low Density Residential	\$6,116	\$345,930	\$1,201	\$75,202	\$428,450	\$6,116	\$345,930	\$1,201	\$75,202	\$428,450
RLM	Low-Medium Density Residential	\$584,586	\$1,691,578	\$55,826	\$592,375	\$2,924,365	\$584,586	\$1,691,578	\$55,826	\$592,375	\$2,924,365
RM	Medium Density Residential	\$106,104	\$130,266	\$55,596	\$274,454	\$566,420	\$106,104	\$130,266	\$55,596	\$274,454	\$566,420
RM/O	Medium Density Residential/ Office & Related Commercial	\$5,940	\$0	\$479	\$389	\$6,808	\$5,940	\$0	\$479	\$389	\$6,808
RMH	Medium-High Density Residential	\$100,357	\$116,510	\$7,860	\$172,338	\$397,065	\$100,357	\$116,510	\$7,860	\$172,338	\$397,065
RMH/O	Medium-High Density Residential/ Office & Related Commercial	\$10,060	\$6,895	\$0	\$0	\$16,954	\$10,060	\$6,895	\$0	\$0	\$16,954
RMH/T-R	Medium-High Density Residential/Travel/Recreation Commercial	\$0	\$0	\$0	\$15,164	\$15,164	\$0	\$0	\$0	\$15,164	\$15,164
TC	Transportation Corridor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
T-R	Travel/Recreation Commercial	\$14,786	\$450,496	\$112,248	\$58,386	\$635,916	\$14,786	\$450,496	\$112,248	\$58,386	\$635,916
T-R/C	Travel/Recreation Commercial/Community Commercial	\$0	\$932	\$6,047	\$8,285	\$15,264	\$0	\$932	\$6,047	\$8,285	\$15,264
T-R/L	Travel/Recreation Commercial/Local Shopping Center	\$0	\$0	\$12	\$13,386	\$13,398	\$0	\$0	\$12	\$13,386	\$13,398
T-R/O	Travel/Recreation Commercial/ Office & Related Commercial	\$58	\$6,048	\$28,531	\$0	\$34,636	\$58	\$6,048	\$28,531	\$0	\$34,636
T-R/O/OS	Travel/Recreation Commercial/Office & Related Commercial/Open Space	\$117,068	\$0	\$0	\$0	\$117,068	\$117,068	\$0	\$0	\$0	\$117,068
T-R/RH	Travel/Recreation Commercial/High Density	\$0	\$0	\$677	\$2,510	\$3,187	\$0	\$0	\$677	\$2,510	\$3,187
U	Public Utilities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UA	Unplanned Areas	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
V	Village	\$262,061	\$30,912	\$0	\$0	\$292,973	\$262,061	\$30,912	\$0	\$0	\$292,973
Total (acres or runoff units)		\$1,476,496	\$8,114,578	\$815,748	\$1,767,518	\$12,174,340	\$1,476,496	\$7,952,449	\$815,748	\$1,745,084	\$11,989,778
		Percent Billable to Project Costs					100%	98%		99%	98%

Values provided herein follow from Table 5-7.

a. Under Municipal City code, publicly owned parcels (including city, county and school lands) cannot be charged PLDA fees when developed.

Table 5-7
PLDA Fee Calculations

Description	Updated PLDA Fees				
	PLDA A	PLDA B	PLDA C	PLDA D	Total
Billable Acres (by runoff level)					
Low	129	848	41	468	1,487
Medium	39	86	33	224	383
High	27	530	115	90	762
Total	195	1,464	189	782	2,631
Total Developable Area	196	1,504	189	790	2,679
Less Unbillable Areas (a)	0	39	0	8	48
Total Billable Acres	195	1,464	189	782	2,631
Total Billable Equivalent RM Acres	243	2,483	440	918	4,084
Billable Project Costs (2006 Costs, by runoff level)					
Low	\$590,702	\$2,037,508	\$57,027	\$667,577	\$3,352,814
Medium	\$355,664	\$397,177	\$65,848	\$522,670	\$1,341,359
High	\$530,130	\$5,517,764	\$692,873	\$554,837	\$7,295,605
Total	\$1,476,496	\$7,952,449	\$815,748	\$1,745,084	\$11,989,778
Un-recovered Project Costs	\$0	\$162,128	\$0	\$22,434	\$184,563
Updated PLDA Fees (\$/Acre, by runoff level with current fee as minimum)					Average
Low	\$4,564	\$2,402	\$1,391	\$1,425	\$2,338
Medium	\$9,076	\$4,630	\$1,968	\$2,331	\$4,043
High	\$19,778	\$10,408	\$6,029	\$6,176	\$9,578

RM: Residential Medium Density development

a. Under California Government Code, development extractions (PLDA fees) must be based on the nexus between the drainage loads from a land use type and the cost of facilities collecting and channeling those loads.

Under Municipal City code, publicly owned parcels (including city, county and district lands) cannot be charged PLDA fees. As such, the PLDA fees cannot be based on recovering project costs allocated to these land use types

This is a draft report and is not intended to be a final representation of the work done or recommendations made by Brown and Caldwell. It should not be relied upon; consult the final report.

**Table 5-8
PLDA Fee Comparison Summary**

Description	Affected Areas (acres)	Affected Dwellings (DUs)	PLDA Fees				Average
			PLDA A	PLDA B	PLDA C	PLDA D	
Current PLDA Fees (\$/Acre, effective 9/1/2006, by runoff level)							
Low			\$2,208	\$4,748	\$3,549	\$49	\$3,014
High			\$3,614	\$7,767	\$5,809	\$79	\$6,419
Updated PLDA Fees (\$/Acre by runoff level, with minimums)							
Low			\$4,564	\$2,402	\$1,391	\$1,425	\$2,338
Medium			\$9,076	\$4,630	\$1,968	\$2,331	\$4,043
High			\$19,778	\$10,408	\$6,029	\$6,176	\$9,578
Changes in PLDA Fees							
Low	1,522	5,524	\$2,356	(\$2,346)	(\$2,158)	\$1,376	(\$675)
High	133	1,796	\$16,164	\$2,641	\$220	\$6,097	\$3,160
PLDA Fees per Residential Household (\$ per dwelling unit, a)							
RLM low-medium density housing with 3.2 DUs/acre (Low Runoff)	1,288	4,122	\$1,426	\$751	\$435	\$445	\$731
RM medium density housing (Runoff Levels: old Low -- proposed Medium)	234	1,402	\$1,513	\$772	\$328	\$389	\$674
RMH medium-high density housing with 11.5 DUs/acre (Runoff old High -- proposed Medium)	99	1,133	\$1,513	\$772	\$328	\$389	\$674
RH High density housing with 19 DUs/ acre (Runoffs: old High -- proposed Medium)	35	663	\$1,041	\$548	\$317	\$325	\$504

a. The housing densities are based on the growth control point densities of the 2000 General Plan Table 37.